

## Description

The N5 series is specifically designed for industrial lighting applications, non-isolated design, operating in constant current with high power factor and a universal input voltage range of 180~265Vac. The compact housing and high efficiency allow the drivers to operate with high reliability, while featuring input surge, output over voltage, short circuit and over temperature protection.



## Product Features

- Universal input voltage: 180~265Vac ;
- Rated Input voltage: 200~240Vac;
- Constant current design, Efficiency up to 95%;
- High surge protection: 6KV line-line, 6KV line-earth;
- Protections: input OVP 400Vac for 1 hour, SCP / OVP / OTP;
- IP67 design for indoor and outdoor applications;
- 7 years warranty;

## Application

Road and street lighting  
 Tunnel lighting  
 Area and flood lighting  
 High-bay lighting

## Models

| Model Number | Input Voltage Range (Vac) | MAX Output Power (W) | Output Voltage Range (Vdc) | Adjustable Current Range (A) | Default Current(A) | Eff. (Typ.) | PF(Typ.) | THD(Typ.) |
|--------------|---------------------------|----------------------|----------------------------|------------------------------|--------------------|-------------|----------|-----------|
| N5-070V260   | 180~265                   | 70                   | 180~260                    | 0.20~0.35                    | 0.35               | 95%         | 0.97     | 10%       |

Notes:

[1]. All specifications are measured at 25°C ambient temperature, input voltage 230Vac, and the typical value tested at full load, if no specific note.

## Input Specifications

| Parameter                       | Min    | Typ.    | Max    | Notes                                         |
|---------------------------------|--------|---------|--------|-----------------------------------------------|
| Input Voltage Range             | 180Vac | -       | 265Vac |                                               |
| Rated Input voltage             | 200Vac | -       | 240Vac | Refer to Output Power vs. Input Voltage curve |
| Input Frequency AC              | 47Hz   | 50/60Hz | 63Hz   |                                               |
| Max Input Current               | -      | -       | 0.45A  | 180Vac & 100% load                            |
| Max Input Power                 | -      | -       | 100W   | 180Vac & 100% load                            |
| Leakage Current                 | -      | -       | 0.70mA | IEC 60598-1; 240Vac/50Hz                      |
| Inrush Current                  | -      | -       | 80A    | 230Vac, 100% load                             |
| Power Factor (PF)               | 0.93   | 0.97    | 0.99   | 200-240Vac , 50/60Hz , 100% load              |
| Total Harmonic Distortion (THD) | -      | 10%     | 15%    | 200-240Vac , 50/60Hz , 85%-100% load          |
| MCB(B16)                        | -      | 17      | -      | 230Vac; 100%load                              |

## Output Specifications

| Parameter                           | Min    | Typ. | Max    | Notes                                                                                      |
|-------------------------------------|--------|------|--------|--------------------------------------------------------------------------------------------|
| Output Voltage Range                | 180Vdc | -    | 260Vdc |                                                                                            |
| Open Circuit Voltage                | -      | -    | 300Vdc |                                                                                            |
| Output Current Range                | 0.20A  | -    | 0.35A  |                                                                                            |
| Full Power Current Range            | 0.27A  | -    | 0.35A  | $P=U*I=70W$ , 100%/load                                                                    |
| Current Accuracy                    | -5%    | -    | +5%    |                                                                                            |
| Total Output Current Ripple (pk-pk) | -      | 10%  | 15%    | 20MHz BW full load & LED load the LED load ripple is slightly different for different LEDs |
| Startup Overshoot Current           | -      | -    | 10%    | 180-265Vac full load condition, LED load                                                   |
| Line Regulation                     | -5%    | -    | +5%    | 25°C±10°C ambient temperature, input changes from 180Vac to 265Vac                         |
| Load Regulation                     | -5%    | -    | +5%    | Load varies from 70% to 100% with 230Vac Input at 25°C±10°C ambient temperature            |
| Turn-on Delay Time                  | -      | -    | 1.0s   | 180-265Vac, 100% load                                                                      |

## General Specifications

| Parameter                      | Min                                            | Typ.      | Max   | Notes                                                                                                 |
|--------------------------------|------------------------------------------------|-----------|-------|-------------------------------------------------------------------------------------------------------|
| Efficiency@230Vac              | 93%                                            | 95%       | -     | 100% load                                                                                             |
| Mean Time Between Failure      | -                                              | 200Khours | -     | 25°C±10°C ambient temperature , 230Vac , 80% load condition (MIL-HDBK-217/SR-332)                     |
| Lifetime                       | -                                              | 50Khours  | -     | 230Vac & 100% load , Tc 75°C , refer to lifetime vs. case temperature curve                           |
| Operating Temperature Ta       | -40°C                                          | -         | +60°C |                                                                                                       |
| Operating Tc for Safety Tc_s   | -40°C                                          | -         | +90°C |                                                                                                       |
| Operating Tc for Warranty Tc_w | -40°C                                          | -         | +75°C | 7-year warranty shell temperature, humidity: 10% to 95% RH                                            |
| Storage Temperature Ta         | -40°C                                          | -         | +75°C | Humidity: 5% to 100% RH                                                                               |
| Altitude                       | -60m                                           | -         | 4000m |                                                                                                       |
| Over Temperature Protection Tc | 90°C                                           | 95°C      | 100°C | Decreases output current, returning to normal after over temperature is removed.                      |
| Short Circuit Protection       | -                                              | -         | 5W    | Hiccup mode and auto recovery. The output shall return to normal when the fault condition is removed. |
| Dimensions (L*W*H)             | 138*58*33mm                                    |           |       |                                                                                                       |
| Net Weight                     | 450g±50g/PCS                                   |           |       |                                                                                                       |
| Package (L*W*H)                | L422xW298xH162; 16PCS/Ctn, Gross Weight: 9.5Kg |           |       |                                                                                                       |

## Safety Specification

| Parameter                            | Min  | Typ.    | Max  | Notes                                                 |
|--------------------------------------|------|---------|------|-------------------------------------------------------|
| Dielectric Strength ( Input-Ground ) | -    | 1600Vac | -    | 60s , Current not exceeding 5mA                       |
| Grounding Resistance                 | -    | -       | 0.1Ω | 25°C±10°C Ambient Temperature, pass 25A Current, 60s. |
| Insulation Resistance                | 10MΩ | -       | -    | Input-PE, 500Vdc/60s/25°C                             |

## Safety Compliance

| Safety Category | Standards                        | Approved | Notes |
|-----------------|----------------------------------|----------|-------|
| CCC             | GB/T 19510.213, GB/T 19510.1     |          |       |
| CE              | EN61347-1, EN61347-2-13, EN62493 | √        |       |
| ENEC            | EN61347-1, EN61347-2-13, EN62384 | √        |       |
| CB              | IEC61347-1, IEC61347-2-13        | √        |       |
| BIS             | IS 15885(PART 2/SEC 13)          |          |       |
| UL              | UL 8750                          |          |       |
| CUL             | CSA C22.2 No.250.13              |          |       |
| KC              | K61347-1, K61347-2-13            |          |       |
| PSE             | J61347-1, J61347-2-13            |          |       |
| SAA             | AS/NZS IEC 61347.2.13            |          |       |
| SAA             | AS/NZS 61347.1                   |          |       |

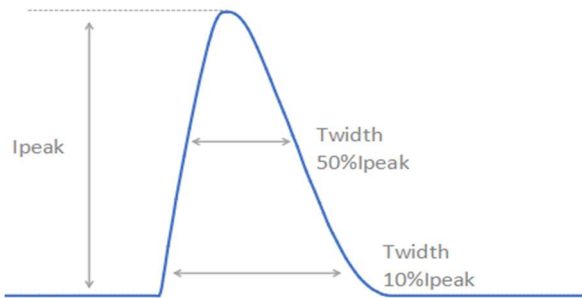
## EMC Compliance

| EMC Category         | Standards                  | Approved | Notes |
|----------------------|----------------------------|----------|-------|
| CCC                  | GB/T 17743, GB 17625.1     |          |       |
| CE                   | EN 55015                   | √        |       |
| CE                   | EN 61000-3-2, EN 61000-3-3 | √        |       |
| CE                   | EN61000-4-2,3,4,5,6,11     | √        |       |
| CE                   | EN 61547                   | √        |       |
| KC                   | K61547                     |          |       |
| KC                   | K00015                     |          |       |
| PSE                  | J55015                     |          |       |
| FCC                  | FCC part 15                |          |       |
| Surge Shock Immunity | ANSI/C82.77-5-2017         |          |       |
| Ringling Wave        |                            |          |       |

## RoHS

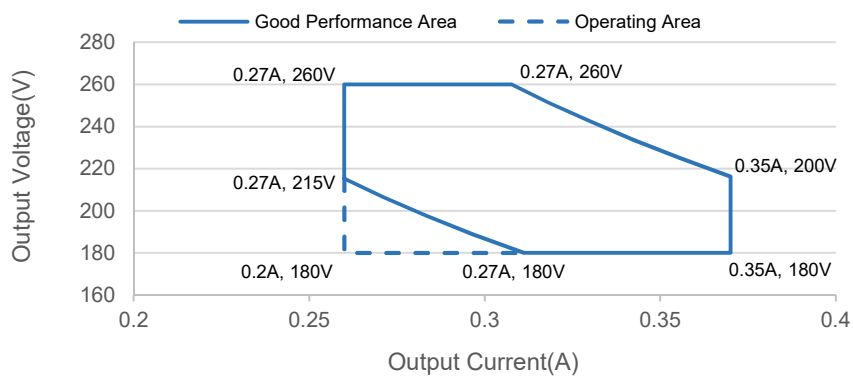
Our products comply with reference to RoHS Directive (EU) 2015/863 amending 2011/65/EU.

## Inrush Current

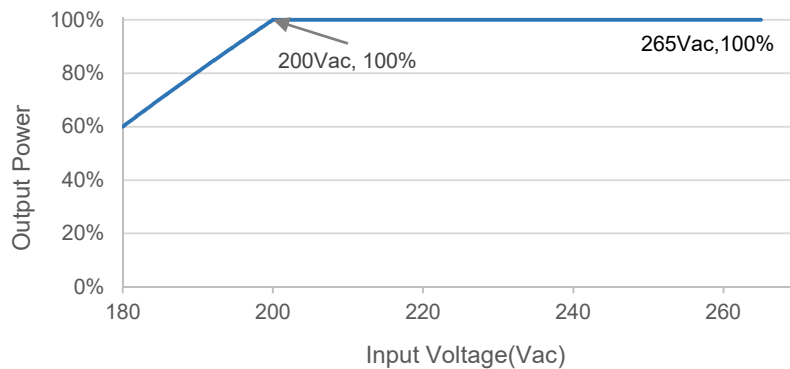


| $V_{in}$ | $I_{peak}$ | $T(@10\% \text{ of } I_{peak})$ | $T(@50\% \text{ of } I_{peak})$ |
|----------|------------|---------------------------------|---------------------------------|
| 230Vac   | 41.6A      | 464 $\mu$ s                     | 200 $\mu$ s                     |

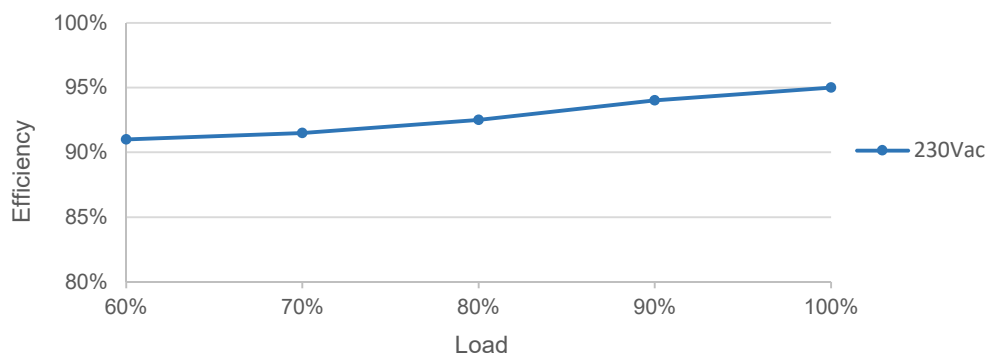
## Output Voltage vs. Output Current

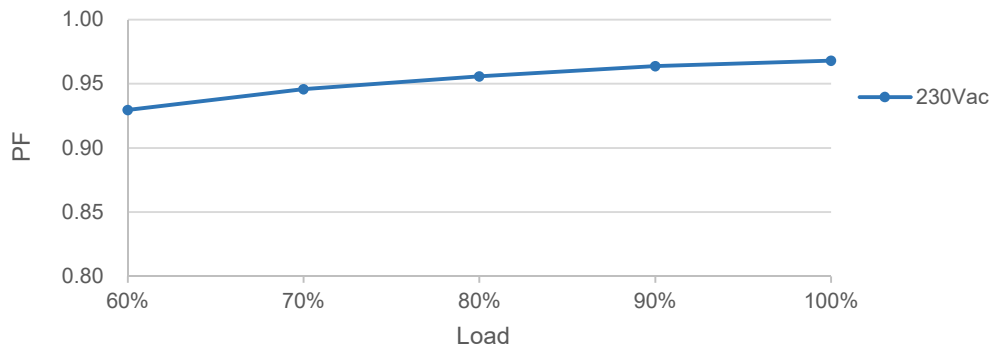
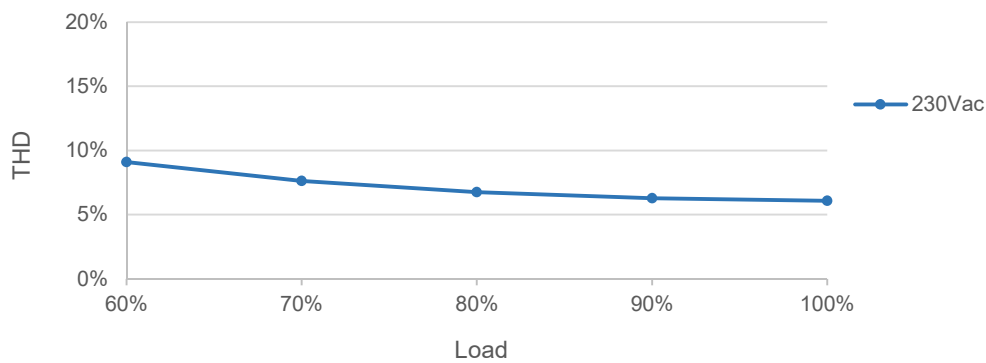
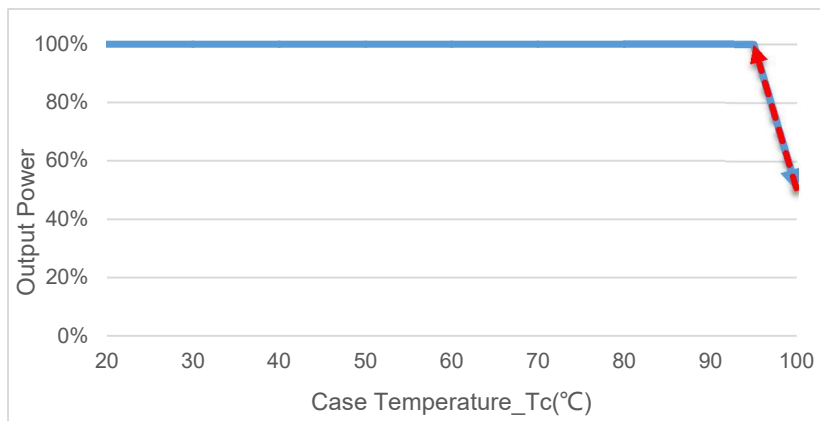
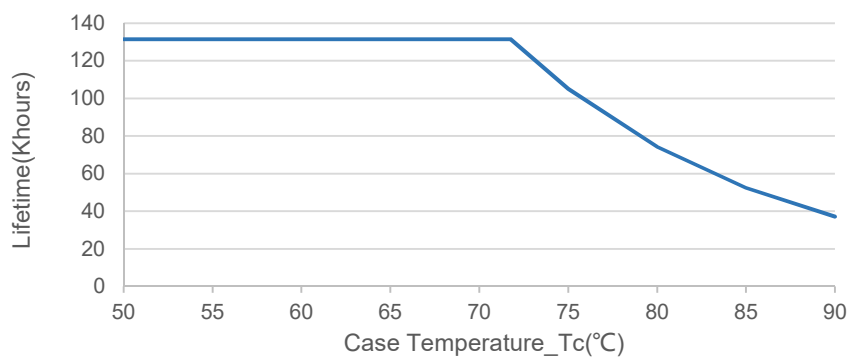


## Output Power vs. Input Voltage

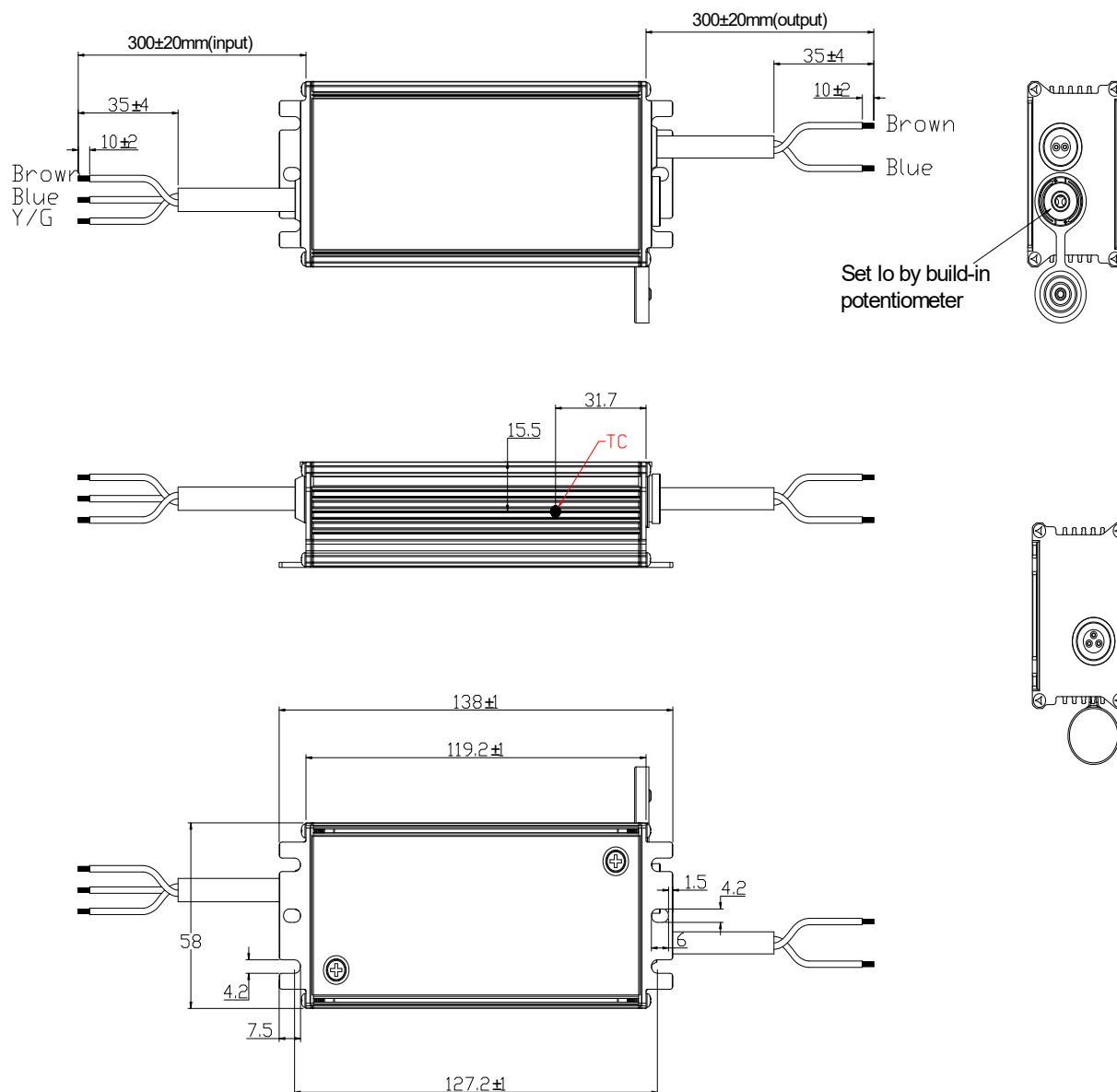


## Efficiency vs. Load



**PF vs. Load****THD vs. Load****Output Power vs. Case Temperature****Lifetime vs. Case Temperature**

## Mechanical Outline



## Specification

|        |                                         |        |
|--------|-----------------------------------------|--------|
| Input  | CCC+VDE 3x1.0mm <sup>2</sup> L=300±20mm | CCC/CE |
| Output | CCC+VDE 2x1.0mm <sup>2</sup> L=300±20mm | CCC/CE |

## Label



Version

|     |               |            |
|-----|---------------|------------|
| A.1 | First release | 2025/10/21 |
| A.4 | ECL202601002  | 2026/01/05 |
|     |               |            |
|     |               |            |
|     |               |            |
|     |               |            |
|     |               |            |



## Specification for Approval

Product Name: 70W Linear Non-isolated Driver

Product Model: N5-070V260

Rev: A.4

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Web Site: <http://www.mosopower.com>

| Prepared By | Checked By | Approved By |
|-------------|------------|-------------|
|             |            |             |

## Specification for Approval

Product Name: 70W Linear Non-isolated Driver

Product Model: N5-070V260

Rev: A.4

| CUSTOMER AUTHORIZED SIGNATURE                                                   |            |             |
|---------------------------------------------------------------------------------|------------|-------------|
| Tested By                                                                       | Checked By | Approved By |
|                                                                                 |            |             |
| (Company seal)Return one copy to MOSO with approved signature and company seal. |            |             |

Address: XiLiSongbai Road 1061, Nanshan District, Shenzhen City, Guangdong, China

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| Prepared By | Checked By | Approved By |
|-------------|------------|-------------|
|             |            |             |